

THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

1. A tracking system comprising

a tag having

a memory containing an identification code,

an RF transceiver for receiving instructions from an interrogator and transmitting data to the interrogator, and

an erasable memory for storing vending event data;

whereby the event data received from one or more sensors is recorded by the tag and when the tag is read by the interrogator, the event data is transferred to the tag and the memory is erased.
2. The tracking system of claim 1 comprising a clock, wherein the event data comprises the date or time, or both, of each event.
3. The tracking system of claim 2 wherein the event data comprises temperature data.
4. The tracking system of claim 2 wherein the event data comprises moisture or humidity data.
5. The tracking system of claim 1 wherein the event data is stored in a non-volatile memory.
6. The tracking system of claim 5 wherein during data transfer the tag derives power from an electromagnetic field generated by the interrogator.

7. The tracking system of claim 1 wherein the memory further comprises and at least one digital key such that the tag transmits data only to an interrogator possessing the key.

8. The tracking system of claim 1 wherein the interrogator is provided with a Global Positioning System (GPS) transponder or a Global System for Mobile communications (GSM) transponder for periodically indicating a position of the interrogator.

9. The tracking system of claim 1 wherein the interrogator is provided with a mobile telephone for communicating with a central station.

10. A vender comprising a merchandise storage portion and a coin mechanism having a handle exposed for rotation, whereby a selected amount of merchandise is dispensed with each rotational cycle of the coin mechanism, having a tracking system comprising

a tag having

a memory containing an identification code and at least one digital key,

an RF transceiver for receiving instructions from an interrogator and transmitting data to the interrogator, and

a RAM for storing vending event data; and

an interface for incrementally increasing a vend count stored in the RAM with each rotation of the coin mechanism.

11. The vender of claim 10 comprising a clock, wherein the vending event data comprises the date or time, or both, of each vend.

12. The vender of claim 10 wherein the vending event data comprises a code representing the type of merchandise being dispensed.

13. The vender of claim 10 wherein the interface comprises

a dog disposed on a pivot, being biased to one of open and closed positions and having on each side of the pivot an upstanding finger in the path of the coin, and

a contact housing positioned with contacts facing a conductive one of the fingers,

whereby as the coin passes one finger it pushes the dog to the closed position to close a circuit and generate a count pulse in the tag, and as the coin passes the other finger it pushes the dog to the open position remote from the contacts.

14. The vender of claim 13 wherein the dog is biased by a spring-loaded ball which settles into one of two notches under the force of a spring.

15. A switch for transmitting an electrical signal to a tracking tag associated with a rotary coin mechanism, comprising

a dog disposed on a pivot, being biased to one of open and closed positions and having on each side of the pivot an upstanding finger in the path of the coin, and

a contact housing positioned with contacts facing a conductive one of the fingers,

whereby as the coin passes one finger it pushes the dog to the closed position to close a circuit and generate a count pulse in the tag, and as the coin passes the other finger it pushes the dog to the open position remote from the contacts.

16. The switch of claim 15 wherein the dog is biased by a spring-loaded ball which settles into one of two notches under the force of a spring.